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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/522,217

DATE: 03/27/2000
TIME: 16:20:19

Input Set: I522217.RAW #4

This Raw Listing contains the General Information
Section and up to first 5 pages.

P.S

ENTERED

```
1 <110> APPLICANT: Novak, Julia E.
2 Presnell, Scott R.
3 Sprecher, Cindy A.
4 Foster, Donald C.
5 Holly, Richard D.
6 Gross, Jane A.
7 Johnston, Janet V.
8 Nelson, Andrew J.
9 Dillon, Stacey R.
10 Hammond, Angela K.
11 <120> TITLE OF INVENTION: NOVEL CYTOKINE ZALPHA11 LIGAND
12 <130> FILE REFERENCE: 99-16
13 <140> CURRENT APPLICATION NUMBER: US/09/522,217
14 <141> CURRENT FILING DATE: 2000-03-09
15 <150> EARLIER APPLICATION NUMBER: US 60/123,547
16 <151> EARLIER FILING DATE: 1999-03-09
17 <150> EARLIER APPLICATION NUMBER: US 60/123,904
18 <151> EARLIER FILING DATE: 1999-03-11
19 <150> EARLIER APPLICATION NUMBER: US 60/142,013
20 <151> EARLIER FILING DATE: 1999-07-01
21 <160> NUMBER OF SEQ ID NOS: 115
22 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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24 <211> LENGTH: 642
25 <212> TYPE: DNA
26 <213> ORGANISM: Homo sapiens
27 <220> FEATURE:
28 <221> NAME/KEY: CDS
29 <222> LOCATION: (47)...(532)
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32 Met Arg Ser
33 1
34 agt cct ggc aac atg gag agg att gtc atc tgt ctg atg gtc atc ttc 103
35 Ser Pro Gly Asn Met Glu Arg Ile Val Ile Cys Leu Met Val Ile Phe
36 5 10 15
37 ttg ggg aca ctg gtc cac aaa tca agc tcc caa ggt caa gat cgc cac 151
38 Leu Gly Thr Leu Val His Lys Ser Ser Ser Gln Gly Gln Asp Arg His
39 20 25 30 35
40 atg att aga atg cgt caa ctt ata gat att gtt gat cag ctg aaa aat 199
41 Met Ile Arg Met Arg Gln Leu Ile Asp Ile Val Asp Gln Leu Lys Asn
42 40 45 50
43 tat gtg aat gac ttg gtc cct gaa ttt ctg cca gct cca gaa gat gta 247
44 Tyr Val Asn Asp Leu Val Pro Glu Phe Leu Pro Ala Pro Glu Asp Val
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45          55          60          65
46 gag aca aac tgt gag tgg tca gct ttt tcc tgt ttt cag aag gcc caa      295
47 Glu Thr Asn Cys Glu Trp Ser Ala Phe Ser Cys Phe Gln Lys Ala Gln
48          70          75          80
49 cta aag tca gca aat aca gga aac aat gaa agg ata atc aat gta tca      343
50 Leu Lys Ser Ala Asn Thr Gly Asn Asn Glu Arg Ile Ile Asn Val Ser
51          85          90          95
52 att aaa aag ctg aag agg aaa cca cct tcc aca aat gca ggg aga aga      391
53 Ile Lys Lys Leu Lys Arg Lys Pro Pro Ser Thr Asn Ala Gly Arg Arg
54 100          105          110          115
55 cag aaa cac aga cta aca tgc cct tca tgt gat tct tat gag aaa aaa      439
56 Gln Lys His Arg Leu Thr Cys Pro Ser Cys Asp Ser Tyr Glu Lys Lys
57          120          125          130
58 cca ccc aaa gaa ttc cta gaa aga ttc aaa tca ctt ctc caa aag atg      487
59 Pro Pro Lys Glu Phe Leu Glu Arg Phe Lys Ser Leu Leu Gln Lys Met
60          135          140          145
61 att cat cag cat ctg tcc tct aga aca cac gga agt gaa gat tcc      532
62 Ile His Gln His Leu Ser Ser Arg Thr His Gly Ser Glu Asp Ser
63          150          155          160
64 tgaggatcta acttgcagtt ggacactatg ttacatactc taatatagta gtgaaagtca      592
65 tttcttttgta ttccaagtgg aggagcccta ttaaattata taaagaaata      642
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67 <211> LENGTH: 162
68 <212> TYPE: PRT
69 <213> ORGANISM: Homo sapiens
70 <400> SEQUENCE: 2
71 Met Arg Ser Ser Pro Gly Asn Met Glu Arg Ile Val Ile Cys Leu Met
72 1          5          10          15
73 Val Ile Phe Leu Gly Thr Leu Val His Lys Ser Ser Ser Gln Gly Gln
74 20          25          30
75 Asp Arg His Met Ile Arg Met Arg Gln Leu Ile Asp Ile Val Asp Gln
76 35          40          45
77 Leu Lys Asn Tyr Val Asn Asp Leu Val Pro Glu Phe Leu Pro Ala Pro
78 50          55          60
79 Glu Asp Val Glu Thr Asn Cys Glu Trp Ser Ala Phe Ser Cys Phe Gln
80 65          70          75          80
81 Lys Ala Gln Leu Lys Ser Ala Asn Thr Gly Asn Asn Glu Arg Ile Ile
82 85          90          95
83 Asn Val Ser Ile Lys Lys Leu Lys Arg Lys Pro Pro Ser Thr Asn Ala
84 100          105          110
85 Gly Arg Arg Gln Lys His Arg Leu Thr Cys Pro Ser Cys Asp Ser Tyr
86 115          120          125
87 Glu Lys Lys Pro Pro Lys Glu Phe Leu Glu Arg Phe Lys Ser Leu Leu
88 130          135          140
89 Gln Lys Met Ile His Gln His Leu Ser Ser Arg Thr His Gly Ser Glu
90 145          150          155          160
91 Asp Ser
92 <210> SEQ ID NO 3
93 <211> LENGTH: 486
94 <212> TYPE: DNA

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95 <213> ORGANISM: Artificial Sequence
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97 <223> OTHER INFORMATION: Degenerate polynucleotide sequence for human
98     zalphall ligand
99 <220> FEATURE:
100 <221> NAME/KEY: misc_feature
101 <222> LOCATION: (1)...(486)
102 <223> OTHER INFORMATION: n = A,T,C or G
103 <400> SEQUENCE: 3
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W--> 105     ggnacnytn g tncayaarws nwsnwsncar ggcncargaym gncayatgat hmgtnatgmgn      120
W--> 106     carytnathg ayathgtnga ycarytnaar aaytaygtna aygayytngt nccngartty      180
W--> 107     ytncngcnc cngargaygt ngaracnaay tgygartggw sngcnttyws ntgyttycar      240
W--> 108     aargcncary tnaarwsngc naayacnggn aayaaygarm gnathathaa ygtwnsnath      300
W--> 109     aaraarytna armgnaarcc nccnwsnacd aaygcnggnm gnmgnccaraa rcaymgnytn      360
W--> 110     acntgyccnw sntgygayws ntaygaraar aarccnccna argarttyyt ngarmgntty      420
W--> 111     aarwsnytny tncaraarat gathcaycar cayytnwsnw snmgncnca yggwnsngar      480
W--> 112     gaywsn                                     486
113 <210> SEQ ID NO 4
114 <211> LENGTH: 535
115 <212> TYPE: DNA
116 <213> ORGANISM: Mus musculus
117 <220> FEATURE:
118 <221> NAME/KEY: source
119 <222> LOCATION: (0)...(0)
120 <223> OTHER INFORMATION: EST1483966 ; GenBank Acc #AA764063
121 <400> SEQUENCE: 4
122     taaacatgta tcatataagg atatgtcata ataaggatta atattatata attataaata      60
123     atttataata cttataatat cattgtttgg ttactaata aatctatgga tacatggtca      120
124     aaatggaaat gaatttttg ccaattatta atccccaaag tcattgaaaa taagcataac      180
125     cattctactg acttgtaga ctctaaacta acataaaaata cattttcaga aataaattca      240
126     accgatctta cttttacatc ttgtggagct gatagaagtt caggatccta agaaaattaa      300
127     ccaaagagta ttagttctga gttggtgata caagtcaaaa ggctcctttt gcattaatta      360
128     aaaaaatatt atttaaattg cattgtgaca aacatggcct taccaagtca ttttcataga      420
129     ttttcagctg ttcaacaatg tcaataaggt gacgaagtct aatcaggagg cgatctggcc      480
130     cttgggggct tgatttatgg gccactgtcc ccaagaagat gactaccaga cagac          535
131 <210> SEQ ID NO 5
132 <211> LENGTH: 33
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: Oligonucleotide primer ZC17212
137 <400> SEQUENCE: 5
138     ggggaattcg aagccatgcc ctcttgggcc ctc                                     33
139 <210> SEQ ID NO 6
140 <211> LENGTH: 30
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Oligonucleotide primer ZC19914

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145 <400> SEQUENCE: 6
146 caatggatgg gtctttagca gcagtaggcc 30
147 <210> SEQ ID NO 7
148 <211> LENGTH: 1614
149 <212> TYPE: DNA
150 <213> ORGANISM: Homo sapiens
151 <400> SEQUENCE: 7
152 atgccgcgtg gctgggcegc ccccttctc ctgctgctgc tccagggagg ctggggctgc 60
153 cccgacctcg tctgctacac cgattacctc cagacgggtca tctgcatcct ggaaatgtgg 120
154 aacctccacc ccagcacgct cacccttacc tggcaagacc agtatgaaga gctgaaggac 180
155 gaggccacct cctgcagcct ccacaggctg gccacaatg ccacgcatgc cacctacacc 240
156 tgccacatgg atgtattcca cttcatggcc gacgacattt tcagtgtcaa catcacagac 300
157 cagtctggca actactccca ggagtgtggc agctttctcc tggctgagag catcaagccg 360
158 gctccccctt tcaacgtgac tgtgaccttc tcaggacagt ataatatctc ctggcgctca 420
159 gattacgaag accctgcctt ctacatgctg aagggaagc ttcagtatga gctgcagtac 480
160 aggaaccggg gagaccctg ggctgtgagt ccgaggagaa agctgatctc agtggactca 540
161 agaagtgtct cctctctccc cctggagttc cgaaaagact cgagctatga gctgcagggtg 600
162 cgggcagggc ccatgcctgg ctctctctac caggggacct ggagtgaatg gactgacctg 660
163 gtcactcttc agaccagtc agaggagtta aagggaaggc ggaaccctca cctgctgctt 720
164 ctctctctgc ttgtcatagt cttcattcct gccttctgga gcctgaagac ccatccattg 780
165 tggaggctat ggaagaagat atgggccgtc cccagccctg agcggttctt catgcccctg 840
166 tacaagggtc gcagcggaga cttcaagaaa tgggtgggtg cacccttcac tggctccagc 900
167 ctggagctgg gaccctggag cccagagggt ccctccaccc tggagggtga cagctgccac 960
168 ccaccacgga gcccggccaa gaggtcgcag ctacaggagc tacaagaacc agcagagctg 1020
169 gtggagtctg acggtgtgcc caagcccagc ttctggccga cagcccagaa ctcggggggc 1080
170 tcagcttaca gtgaggagag ggatcgccca tacggcctgg tgtccattga cacagtgact 1140
171 gtgctagatg cagaggggcc atgcacctgg ccctgcagct gtgaggatga cggctaccca 1200
172 gccctggacc tggatgctgg cctggagccc agcccaggcc tagaggaccc actcttggtg 1260
173 gcagggaacca cagtcctgtc ctgtggctgt gtctcagctg gcagccctgg gctaggaggg 1320
174 cccctgggaa gcctcctgga cagactaaag ccacccttg cagatgggga ggactgggct 1380
175 gggggactgc cctgggtgg cgggtcacct ggaggggtct cagagagtga ggcgggctca 1440
176 cccctggccg gcctggatat ggacagcttt gacagtggct ttgtgggctc tgactgcagc 1500
177 agccctgtgg agtgtgactt caccagcccc ggggacgaag gacccccccg gagctacctc 1560
178 cgccagtggg tggtcattcc tccgccactt tcgagccctg gaccccaggc cagc 1614
179 <210> SEQ ID NO 8
180 <211> LENGTH: 30
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Oligonucleotide primer ZC19913
185 <400> SEQUENCE: 8
186 ggcctactgc tgctaaagac ccatccattg 30
187 <210> SEQ ID NO 9
188 <211> LENGTH: 33
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Oligonucleotide primer ZC20097
193 <400> SEQUENCE: 9
194 acatctagat tagctggcct ggggtccagg cgt 33

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195 <210> SEQ ID NO 10
196 <211> LENGTH: 21
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Oligonucleotide primer ZC12700
201 <400> SEQUENCE: 10
202      ggaggtctat ataagcagag c                                21
203 <210> SEQ ID NO 11
204 <211> LENGTH: 21
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Oligonucleotide primer ZC5020
209 <400> SEQUENCE: 11
210      cactggagtg gcaacttcca g                                21
211 <210> SEQ ID NO 12
212 <211> LENGTH: 20
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Oligonucleotide primer ZC6675
217 <400> SEQUENCE: 12
218      gtggatgccg aaccagtc                                20
219 <210> SEQ ID NO 13
220 <211> LENGTH: 21
221 <212> TYPE: DNA
222 <213> ORGANISM: Artificial Sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Oligonucleotide primer ZC7727
225 <400> SEQUENCE: 13
226      tggtcacagc tacctgggct c                                21
227 <210> SEQ ID NO 14
228 <211> LENGTH: 26
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: Oligonucleotide primer ZC8290
233 <400> SEQUENCE: 14
234      ccaccgagac tgcttgatc accttg                                26
235 <210> SEQ ID NO 15
236 <211> LENGTH: 20
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Oligonucleotide primer ZC19572
241 <400> SEQUENCE: 15
242      gtcctgtggc tgtgtctcag                                20
243 <210> SEQ ID NO 16
      <211> LENGTH: 21

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: I522217.RAW

Line	Error/Warning	Original Text
104	W "N" or "Xaa" used: Feature required	atgmgnwsnw snccnggnaa yatggarmgn athgtnat
105	W "N" or "Xaa" used: Feature required	ggnacnytnng tncayaarws nwsnwsncar ggncarga
106	W "N" or "Xaa" used: Feature required	carytnathg ayathgtnga ycarytnaar aaytaygt
107	W "N" or "Xaa" used: Feature required	ytncnngcnc cngargaygt ngaracnaay tgygartg
108	W "N" or "Xaa" used: Feature required	aargcncary tnaarwsngc naayacnggn aayaayga
109	W "N" or "Xaa" used: Feature required	aaraarytna armgnaarcc nccnwsnacn aaygcngg
110	W "N" or "Xaa" used: Feature required	acntgyccnw sntgygayws ntaygaraar aarccncc
111	W "N" or "Xaa" used: Feature required	aarwsnytny tncaraarat gathcaycar cayytnws
112	W "N" or "Xaa" used: Feature required	gaywsn
617	W Invalid/Missing Amino Acid Numbering	
1026	W Line data has been corrected	Thr His Gly Ser Glu Asp Ser *
1027	W Invalid/Missing Amino Acid Numbering	515
1223	W Line data has been corrected	Leu Lys Trp Leu Leu Gln Lys Met Ile His G
1466	W Line data has been corrected	Gln Thr Gln Ser Glu Glu Leu Lys Glu Gly T
1695	W "N" or "Xaa" used: Feature required	aaaaaaaaa aaaaaaaaaa gttagatgca ccnttggg